

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 715108**Date: 06-01-2014****Subject Name: Elective-II Cloud Computing****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define and differentiate between common network terminology. Explain in detail how networks work. **07**
- (b) Explain TCP/IP model in detail. Discuss difference between TCP/IP and UDP protocols for Socket-based communication. **07**
- Q.2** (a) What are the 5 essential cloud computing characteristics? Explain in detail common cloud characteristics. What are 3 cloud service Models? Explain Service Model Architectures. **07**
- (b) Identify various types of resources that can usefully be shared in computer networks. Give examples of their sharing as it occurs in distributed systems. **07**
- OR**
- (b) Discuss briefly key challenges that one needs to address in the design and development of distributed applications. **07**
- Q.3** (a) Discuss peer-to-peer architectural model for construction of distributed systems. **07**
- (b) Identify main types of security threats that might occur in the Internet with an example. **07**
- OR**
- Q.3** (a) Discuss secure socket layer (SSL) architecture and its components. Discuss operation of a typical domain name server (DNS) with suitable example. **07**
- (b) Explain in details 4 cloud deployment models. **07**
- Q.4** (a) Explain cloud security in terms of analysis, advantages and challenges **07**
- (b) Explain “why” and “how” of cloud migration. **07**
- OR**
- Q.4** (a) What is cloud computing? Why we should know about it? Why we call “cloud computing”? **07**
- (b) What are common attributes of cloud computing? **07**
- Q.5** (a) What are the trends observed with cloud computing? **07**
- (b) Explain Hypervisor in detail. Explain VMM and VM in detail. **07**
- OR**
- Q.5** (a) Describe the general concepts behind each layer of the OSI networking models **07**
- (b) What are different approaches to server virtualization? What are different approaches to desktop virtualization? **07**
